

IN THE CLAIMS:

Please amend Claims 1-10, 13, 14, 17-19 and add new Claims 20-28 as follows.

1. (Currently Amended) A drive circuit ~~characterized by~~ comprising of:
  - a plurality of current signal generation circuits for outputting a current signal to each of a plurality of output units;
  - a current signal output line to which outputs of said plurality of current signal generation circuits are commonly connected;
  - a control circuit for controlling each of said plurality of current signal generation circuits to be a current signal output state capable of evaluating an output of [[a]] one or more specific circuits of said plurality of current signal generation circuits on a basis of current values output through said current signal output line;
  - a correction value output circuit for evaluating the output of said one or more specific circuits of said plurality of current signal generation circuits on a basis of the current values output through said current signal output line to output a correction value according to an evaluation result; and
  - a correction circuit for correcting an image signal supplied to said current signal generation circuits by means of the correction value.

2. (Currently Amended) A drive circuit according to claim 1, wherein said control circuit supplies a predetermined signal to said one or more specific circuits of said current signal generation circuits, and commonly supplies a signal different from the predetermined signal to the other current signal generation circuits ~~commonly~~.

3. (Currently Amended) A drive circuit according to claim 2, wherein the different signal is a signal such that a current value of a current signal output from each of the other ~~or others of the~~ said current signal generation circuits, to which the different signal has been supplied, is sufficiently smaller than a current value of the current signal output from said one or more specific circuits of said current signal generation circuits.

4. (Currently Amended) A drive circuit ~~characterized by~~ comprising of:  
a plurality of current signal generation circuits for outputting a current signal to each of a plurality of output units;  
a current signal output line to which outputs of said plurality of current signal generation circuits are commonly connected;  
a correction value output circuit for outputting a correction value obtained by evaluating the output of a one or more specific circuits of said plurality of current signal generation circuits on a basis of current values output through said current signal output line; and

a correction circuit for correcting an image signal supplied to said current signal generation circuits by means of the correction value.

5. (Currently Amended) A device circuit according to claim 1, further characterized by comprising:

a switch for realizing a state in which said current signal output line is connected to said plurality of current signal generation circuits simultaneously.

6. (Currently Amended) A device circuit according to claim 4, further characterized by comprising:

a switch for realizing a state in which said current signal output line is connected to said plurality of current signal generation circuits simultaneously.

7. (Currently Amended) A drive circuit according to claim 1, further characterized by comprising:

a plurality of switches for ~~severally~~ controlling connection relations between said plurality of current signal generation circuits and said current signal output line, said plurality of switches being controlled by a common control signal.

8. (Currently Amended) A drive circuit according to claim 4, further characterized by comprising:

a plurality of switches for ~~severally~~ controlling connection relations between said plurality of current signal generation circuits and said current signal output line, said plurality of switches being controlled by a common control signal.

9. (Currently Amended) A drive circuit according to claim 1, further characterized by comprising:

a plurality of switches for ~~severally~~ controlling connection relations between said plurality of current signal generation circuits and said plurality of output units, said plurality of switches being controlled by a common control signal.

10. (Currently Amended) A drive circuit according to claim 4, further characterized by comprising:

a plurality of switches for ~~severally~~ controlling connection relations between said plurality of current signal generation circuits and said plurality of output units, said plurality of switches being controlled by a common control signal.

11. (Original) A drive circuit according to claim 1, wherein said drive circuit is a drive circuit for a display apparatus including display elements, and said display apparatus includes at least a part of said display elements formed on a substrate on which said current signal generation circuits and said current signal output line are formed.

12. (Original) A drive circuit according to claim 4, wherein said drive circuit is a drive circuit for a display apparatus including display elements, and said display apparatus includes at least a part of said display elements formed on a substrate on which said current signal generation circuits and said current signal output line are formed.

13. (Currently Amended) A drive circuit according to claim 1, wherein each of said current signal generation circuits includes at least a circuit for outputting a current signal having a squared value of a value of an input signal, and said correction value output circuit outputs a correction value obtained by calculating a square root of a ratio between an output evaluation value of said one or more specific circuits of said current signal generation circuits obtained by the evaluation value and a reference value.

14. (Currently Amended) A drive circuit according to claim 8, wherein each of said current signal generation circuits includes at least a circuit for outputting a current signal having a squared value of a value of an input signal, and said correction value output circuit outputs a correction value obtained by calculating a square root of a ratio between an output evaluation value of said one or more specific circuits of said current signal generation circuits obtained by the evaluation value and a reference value.

15. (Original) A drive circuit according to claim 13, wherein said correction value output circuit includes a calculation circuit for calculating the square root, and

the calculation is an approximation calculation performed by classifying according to a value of the ratio between the output evaluation value and the reference value.

16. (Original) A drive circuit according to claim 14, wherein said correction value output circuit includes a calculation circuit for calculating the square root, and the calculation is an approximation calculation performed by classifying according to a value of the ratio between the output evaluation value and the reference value.

17. (Currently Amended) A display apparatus ~~characterized by~~ comprising:  
a drive circuit according to claim 1;  
a plurality of data lines connected to the plurality of output portions of said drive circuit ~~severally~~; and  
a plurality of display elements connected to said plurality of data lines ~~severally~~.

18. (Currently Amended) A display apparatus ~~characterized by~~ comprising:  
a drive circuit according to claim 4;  
a plurality of data lines connected to the plurality of output portions of said drive circuit ~~severally~~; and  
a plurality of display elements connected to said plurality of data lines ~~severally~~.

19. (Currently Amended) An evaluation method of a drive circuit including a plurality of current signal generation circuits for outputting current signals to each of a plurality of output units, ~~characterized by~~ comprising the steps of:

connecting outputs of ~~said~~ the plurality of current signal generation circuits to a common current signal output line;

controlling each of ~~said~~ the plurality of current signal generation circuits to a current signal output state in which an output of one or more specific circuits of ~~said~~ the current signal generation circuits can be evaluated on a basis of current values output through ~~said~~ the current single output line; and

evaluating an output of said one or more specific circuits of said current signal generation circuits on a basis of the current values output through said current signal output line.

20. (New) An active matrix display apparatus, comprising:  
a plurality of pixel circuits arranged in a matrix, wherein said pixel circuit comprises an EL element, a thin film transistor for controlling a light emission of said EL element, and a capacitor provided at a gate of said thin film transistor, such that a voltage corresponding to an input current signal is held at said capacitor, and said EL element emits light based on the current signal;

a plurality of current signal generation circuits each including a thin film transistor for converting an input image signal voltage to produce the current signal to be inputted through a data line into each of said plurality of pixel circuits; and

a correction circuit for detecting the current signal outputted through a signal output line from said plurality of current signal generation circuits, and for correcting the input image signal voltage to be inputted into the current signal generation circuits based on a result of the detection.

21. (New) The active matrix display apparatus according to claim 20, wherein said EL element is an organic EL element.

22. (New) The active matrix display apparatus according to claim 20, wherein the corrected input image signal voltage is supplied from a DAC provided in an external control circuit to said plurality of current signal generation circuits.

23. (New) An active matrix display apparatus comprising:  
a plurality of pixel circuits arranged in a matrix, wherein said pixel circuit comprises an EL element, a thin film transistor for controlling a light emission of said EL element and a capacitor provided at a gate of said thin film transistor, such that a voltage corresponding to an input current signal is held at said capacitor, and said EL element emits light based on the current signal;



a plurality of current signal generation circuits each including a thin film transistor for converting an input image signal voltage to produce the current signal to be inputted through a data line into each of said plurality of pixel circuits;

a storage circuit for storing a correction value for use in correcting a variation of the current signal outputted from said plurality of current signal generation circuits; and

a correction circuit for correcting the input image signal voltage to be inputted into said current signal generation circuits based on the correction value stored in said storage circuit.

24. (New) The active matrix display apparatus according to claim 23, wherein said EL element is an organic EL element.

25. (New) The active matrix display apparatus according to claim 20, wherein the corrected input image signal voltage is supplied from a DAC provided in an external control circuit to said plurality of current signal generation circuits.

26. (New) A method of driving and controlling an active matrix display apparatus comprising a plurality of pixel circuits arranged in a matrix, wherein the pixel circuit comprises an EL element, a thin film transistor for controlling a light emission of the EL element and a capacitor provided at a gate of the thin film transistor, the method comprising steps of:

detecting the current signal outputted through a signal output line from a plurality of current signal generation circuits each including a thin film transistor;

correcting the image signal voltage to be inputted into the current signal generation circuits based on a result of the detection;

inputting the image signal voltage into the plurality of current signal generation circuits, converting the image signal voltage into the current signal, and inputting the current signal into the pixel circuit; and

holding in the capacitor a voltage corresponding to the current signal inputted, to drive the EL element to emit light based on the current signal.

27. (New) A method of driving and controlling an active matrix display apparatus comprising a plurality of pixel circuits arranged in a matrix, wherein the pixel circuit comprises an EL element, a thin film transistor for controlling a light emission of the EL element and a capacitor provided at a gate of the thin film transistor, the method comprising steps of:

reading out, from a storage circuit, a correction value for use in correcting a variation of the current signal outputted from a plurality of current signal generation circuits each including a thin film transistor;

correcting an image signal voltage to be inputted into the current signal generation circuits;

inputting the corrected image signal voltage into the plurality of current signal generation circuits to convert the image signal voltage into a current signal, and inputting the current signal into the pixel circuit; and

holding a voltage corresponding to the input current signal, to drive the EL element to emit light based on the current signal.

28. (New) An active matrix display apparatus comprising:

a plurality of pixel circuits arranged in a matrix, wherein the pixel circuit comprises an EL element, a thin film transistor for controlling a light emission of said EL element and a capacitor provided at a gate of said thin film transistor, such that a voltage corresponding to an input analog current signal is held at the capacitor, and said EL element emits light based on the analog current signal;

a plurality of current signal generation circuits each including a thin film transistor for converting an input analog image signal voltage to produce the analog current signal to be inputted through a data line into each of said plurality of pixel circuits;

a storage circuit for storing a correction value for use in correcting a variation of the analog current signal outputted from said plurality of current signal generation circuits;

a correction circuit for correcting the input digital image signal based on the correction value stored in said storage circuit; and

a DAC for converting the corrected digital image signal from said correction circuit into an analog image signal voltage, and inputting the analog time signal voltage into said current signal generation circuits.